



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE RAILROAD SITUATION

BY WALKER D. HINES

Formerly Director General of the Railroads

There was never a time in the history of our country when the railroad situation was as difficult to appraise as it is today. Since the World War, few, if any, lines of industry have returned to a normal status, and throughout the world I believe the only great industries which admit of reasonably confident treatment are those which were fortunate enough to make extraordinary profits during the war and which were farsighted and prudent enough to conserve their profits so as to have a large reserve to carry them successfully through the long and trying period of readjustment. But this fortunate class does not embrace the public service enterprises of the world, whose profits are limited, and which are unable to shut down their plants in periods of difficulty. Our railroads are no exception to this statement. They had no opportunity prior to federal control to make vast profits out of the war, they had comparatively small reserves at the beginning of the war, and they had no chance to build up their reserves to any large extent out of the government rental accruing to them during the war.

There are at this time two special difficulties in getting a satisfactory idea as to the present or prospective situation of our railroads. One difficulty grows out of a state of mind and the other difficulty grows out of the facts.

The state of mind of railroad officers and of the public in general has not been favorable to obtaining a well proportioned and accurate estimate of the railroad situation. In order to win the war the government took possession of the railroads and operated them as a unified system and then terminated the unified operation as soon as a scheme of legislation for their further regulation and protection could be adopted. This unified governmental possession and control, suddenly entered upon to meet a paramount emergency and provisionally continued only long enough to secure legislation, constituted a fact so unprecedented and so striking as to dominate the thought on the railroad problem and displace nearly all other thoughts on the subject. Consequently undue attention has been given to exaggerated and poorly balanced impressions as to the influence of federal control, when the time and energy could have been more profitably spent on a

more comprehensive estimate of things as they are, giving due regard to their relative importance. Such a state of mind was perhaps inevitable, but in any event it is a fact which must be considered in viewing the present railroad situation.

A single illustration will emphasize the effect of this state of mind. I believe the thing which has caused more discussion in public hearings and addresses and in the press than anything else has been the National Agreement which I signed with the shop crafts on September 20, 1919, to remain in effect "during federal operation." One of the most costly branches of railroad operation is the maintenance of equipment. Its cost was \$1,230,000,000 in 1919 and was \$345,000,000 more or \$1,575,000,000 in 1920. I believe the impression has been created that a very large part of this heavy cost and particularly nearly all of the great increase in 1920 over 1919 is due to the National Agreement, and that upon the Labor Board's correcting the undesirable features of that Agreement many hundreds of millions of dollars will be saved in the cost of maintenance of equipment.

The fact is that practically all the basic rules which have a proportionately large bearing on cost and which were incorporated in the National Agreement were not initiated at that time, but represented rules or practices which the experienced railroad men in the Railroad Administration (adopting what prior to the war was in effect on numerous railroads) had already made applicable to all the railroads in 1918. Therefore, in the respects involving especially large amounts of operating cost, these rules, contrary to the popular impression, figure in the operating cost for 1919 and do not account for the increase in maintenance of equipment of nearly \$350,000,000 in 1920. Furthermore, the features of these rules which have the most significance in dollars and cents have been approved by the Labor Board. In some respects the Labor Board has ordered changes which will result in substantial savings, but far short of what the public has been led by the widespread discussion and criticism to expect, especially because many of the things most extensively discussed consist of extreme cases which represent a very small percentage of the operating cost.

I shall discuss this National Agreement at greater length on another occasion. I mention it here simply to illustrate the state of mind which is so attracted by misleading and fragmentary retrospection concerning federal control as to be drawn away

from a study with due perspective and balance of the great question as to how many billion dollars it is going to cost to operate the railroads in the future.

But while the state of mind has not been favorable to an analysis bringing out the real bearing of existing conditions upon the prospective cost of railroad operations, an equally great difficulty confronts us on account of the facts themselves, since they involve so many fluctuations as almost to defy intelligent comparison of railroad operations. Prior to the war it was possible to make very useful comparison of results month by month with the corresponding month of the preceding years. But this has become largely impracticable at present, and indeed the comparison of one year with another is so affected by sudden and fundamental changes largely influencing operating costs that the utility of the comparisons is seriously impaired. A brief mention of some of these abnormal fluctuations in the facts will emphasize this point.

In 1918 the following were a few of the unprecedented conditions tending to upset general comparison with preceding years and also with subsequent years:

1. The year began with the most extraordinary congestion of railroad traffic, accumulated in the preceding year, which had ever been known up to that time.

2. During the first three months the country had the severest winter weather it had ever known.

3. In May there was a general increase in railroad wages, retroactive to January 1, estimated to involve \$360,000,000 per year, and the basic eight hour day was extended to all employees not theretofore enjoying it.

4. In June there was an increase of about 28 per cent in freight rates and an increase (averaging about 18 per cent) to three cents per mile in passenger rates.

5. In July there was a general increase in wages of the shop crafts retroactive to January 1, and time and a half was allowed after eight hours and for all work on Sundays and holidays. These changes involved an estimated increase of about \$209,000,000 per year. In December instruction was given to establish the hourly basis instead of the piecework basis whenever a substantial majority of the shop employees should so desire, and piecework was accordingly eliminated, the elimination being completed in most instances on or before February 1, 1919. (In estimating the

effect of piecework, it is important to remember that prior to the war some of the successful railroads had little, if any, piecework in their shops and many others used it for only a comparatively small part of their shop work.)

6. Effective in September, there was a general readjustment of wages of clerks and of maintenance of way employees (pro rata overtime for the ninth and tenth hours and time and a half after the tenth hour being allowed), involving an estimated increase of about \$190,000,000 per year.

7. The Armistice came in November and started one of the most acute slumps in business the country had ever known up to that time.

8. In December there was a general readjustment in the wages of the telegraphers and station agents, retroactive to October 1 (time and a half being allowed after eight hours), involving an estimated increase of about \$25,000,000 per year.

In 1919 the following were some of the principal conditions rendering comparisons exceedingly difficult:

1. The slump in business became more acute and lasted throughout the first six months of the year, reducing revenues far more than expenses could be reduced.

2. In March there was a readjustment in wages of train and engine men, retroactive to January 1, 1919, and time and a half after eight hours was allowed to train and engine men in yard service. These changes were estimated to involve about \$60,000,000 per year.

3. In March the Senate adjourned without passing the railroad appropriation, greatly intensifying the operating embarrassments growing out of the slump in business.

4. In August there was an unauthorized strike of shop men and enginehouse men in many parts of the country seriously interfering with maintenance and also with the handling of traffic, which was then rapidly increasing.

5. In September there was a readjustment of wages of the shop crafts retroactive to May 1, estimated to involve about \$50,000,000 per year.

6. Beginning November 1, there was the first nationwide bituminous coal miners' strike, which almost paralyzed business for about seven weeks and dislocated the distribution of coal cars and upset the distribution of coal and the prices of railroad fuel for several months.

7. In December the train and engine men were allowed time and a half for overtime in road freight service, at the same time numerous arbitrary allowances in their favor being eliminated, the net cost being estimated to be about \$38,000,000 per year; and time and a half for overtime after eight hours was allowed for clerks, and for maintenance of way employees, the cost being estimated to be about \$25,000,000 per year.

In the year 1920, some of the principal conditions disturbing the reliability of comparisons were the following:

1. The months of January and February, and to some extent March, were characterized by exceedingly severe weather, nearly as bad in some places as the weather two years before.

2. In April, one month after the resumption of private control, the unauthorized switchmen's strike began, with the result that there was produced probably the most acute transportation crisis that ever confronted the country. The crisis was so acute that the railroads had to call on the Interstate Commerce Commission to unify again their transportation operations to the extent necessary to handle the traffic, and under the direction and control of the Commission the railroads responded to the crisis and performed a most effective transportation service, but at heavy cost, this partly accounting for the increase in the cost of transportation in 1920 as compared with 1919, the increase being over \$700,000,000 or nearly 33 per cent.

3. Effective May 1, 1920, came the increase in wages, which was ordered by the newly created Labor Board for all classes of railroad employees, and which has been variously estimated at from \$618,000,000 to \$800,000,000 per year.

4. Effective September 1, 1920, came the increases of 25, 35, and 40 per cent in freight rates, according to territory, and of 20 per cent in passenger rates.

5. In the late fall of 1920 there began an extraordinary slump in business, even more pronounced than that in 1919.

Coming to 1921, we find the following among the principal conditions making comparisons exceedingly difficult:

1. The continuance of the slump in business throughout the year.

2. A reduction effective July 1 in wages so as to cut off approximately half of the heavy increase in wages which after the return to private control was made by the Labor Board, effective May 1, 1920.

3. We had what is probably the most unprecedented curtailment of maintenance which the railroads of the country have ever seen. It does not seem practicable now to estimate how much maintenance has been postponed or how much operating expenses will have to be increased in the future in order to make up for the maintenance which the railroad companies have deferred on account of the slump in business. Any inference from the reduction in operating cost or in the number of employees or in the number of hours of work paid for must be made with the clear realization that much of the reduction has been due simply to the postponement of necessary maintenance work.

In view of such kaleidoscopic railroad conditions in the last four years, it is far more difficult than ever to form an idea as to the railroad situation. The factors have been abnormal, rapidly fluctuating, and almost hopelessly beclouding. In other words, the railroad business is not exempt from the period of storm, stress, and uncertainty which afflicts the whole world as a result of the war and which makes it so difficult to see the way ahead.

The statement I have just given of exceptional conditions in the four years 1918 to 1921 helps to explain in part, but of course is too general and incomplete to explain in full, the extraordinary results of railroad operations which I am going to give in round figures for Class I roads for those four years. I take the figures for the three complete years 1918, 1919, and 1920 from Table 19 of the testimony given by Mr. L. E. Wettling on behalf of the Railroad Executives before the Senate Committee on Interstate Commerce in June, 1921. Mr. Wettling explained that in this table he excluded from the figures of 1920 \$64,500-000 of back mail pay received in that year and distributed the same to the preceding years to which it pertained. I give the results in round sums:

OPERATING REVENUES

1918	\$4,910,900,000
1919	5,171,700,000
1920	6,106,900,000

OPERATING EXPENSES

1918	\$3,982,000,000
1919	4,399,700,000
1920	5,768,700,000

NET OPERATING INCOME

(After deducting taxes, hire of equipment, joint facility rents, etc.)

1918	\$ 668,500,000
1919	481,900,000
1920 (Deficit)	2,500,000

It may be borne in mind that in the "test period," i. e., the three years ending June 30, 1917, the net operating income of the Class I railroads approximated \$900,000,000.

I take the figures for the available ten months of 1921 (ending with October) and the figures for the corresponding months of the year 1920 from the Interstate Commerce Commission's Bulletin for October, 1921.¹

OPERATING REVENUES

10 Months of 1920.....	\$5,082,800,000
10 " " 1921.....	4,672,600,000

OPERATING EXPENSES

10 Months of 1920.....	4,803,400,000
10 " " 1921.....	3,880,300,000

NET OPERATING INCOME

(After deducting taxes, hire of equipment, joint facilities, rents, etc.)

10 Months of 1920.....	6,000,000
10 " " 1921.....	496,800,000

In considering this 10 months period, it is particularly important to bear in mind the great reduction in maintenance expenses. The totals of maintenance of way and structures and of equipment of these 10 months periods were as follows:²

10 Months 1920.....	\$2,182,219,000
10 Months 1921.....	1,708,950,000

Decrease in 10 Months of 1921.....\$ 473,269,000

In view of such results during the last four years and of the extraordinary and fluctuating conditions I have mentioned, as

¹Mr. Wettling's Table 19 does not include switching and terminal companies. The Interstate Commerce Commission's figures for the 10 months of 1920 and 1921 include 16 switching and terminal companies, but it is assumed that difference does not substantially impair the usefulness of the figures in this connection.

well as others not mentioned, and some of which doubtless have not been adequately investigated, the effort to forecast the future on the basis of the present railroad situation is almost hopelessly baffling.

Of course, a fundamental condition of railroad prosperity is the enjoyment of adequate traffic, and we know that business has been throughout the year 1921, and still is, substantially below normal. The change in rates September 1, 1920, makes it exceedingly difficult to deduce from the operating revenues the change in the volume of business. But the freight loading is more suggestive. Throughout 1921, almost without exception, the freight loaded per week has been at least from 100,000 to 150,000 carloads less than in the corresponding weeks of 1920. The average decrease has been perhaps 12 or 14 per cent for the year. For two weeks in October, 1921, the loading approached within 50,000 carloads of last year, but then began to drop and has kept about 100,000 carloads per week below the rapidly dropping traffic of last year. Indeed in recent weeks the loading has been less than it was in corresponding weeks of 1919 during the coal strike or in 1918 following the Armistice. It seems a reasonably safe assumption that a return of railroad prosperity cannot be expected until there shall be a substantial increase in the volume of traffic, and that meantime every practicable economy is imperative.

But even with a return to normal traffic the greatest concern must continue to be felt as to the operating expenses, and this is particularly true because of the strong pressure which will continue to be manifested for the reduction of rates.

A comprehensive and impartial study of the probable cost of operation on the basis of the factors as they now exist would contribute greatly to an understanding of the railroad situation. I hope that the Interstate Commerce Commission will have occasion to consider the practicability and advisability of undertaking such a study for the Class I Railroads in connection with the pending general rate investigation. Such a study should, of course, allow for the savings estimated to result from the modifications which the Labor Board is making in the rules and working con-

²On the assumption that the sum of \$64,500,000 back mail pay which Mr. Wetling eliminated from the figures of 1920 was included in the first 10 months of 1920, it would follow that upon the elimination of that sum there would be shown a deficit for the first 10 months of 1920 of approximately \$58,500,000.

ditions, and should also allow for a normal and proper program for maintenance, both of way and structures and of equipment. While no such study could be conclusive, it would substantially clarify the present state of knowledge on the subject.

I believe such a study would be exceedingly useful, although its effect may later be modified by the results of the current efforts by the railroad companies to secure further reductions in wages. Doubtless these efforts will eventually go to the Labor Board for decision. But even if the Labor Board should decide in favor of substantial wage reductions, I do not believe such a decision will be a solution of the great problem of heavy operating cost, because I have no doubt that wages of railroad employees, even after any probable reduction, and also the cost of fuel and other supplies and materials, will still be very much above the prewar level, and the railroad companies and the public will still be confronted with the necessity of finding new ways to reduce the cost of operation.

In considering the present railroad operating cost, it is important to remember that the heavy increase in labor cost is probably particularly burdensome in the maintenance work and in the terminal part of transportation work, and it seems to be these very branches of railroad operating cost where less progress has been made in developing labor saving methods, and where additional basic statistics would be most useful.

Indeed the question arises whether sufficient attention has been paid to the problems of securing both as to terminal service and as to maintenance service the maximum output for the expenditure made. Great stress has been placed by railroad managers and by the public on the increased efficiency obtained from increasing the trainload. It is, of course, true that an increase in the trainload tends to obtain more ton miles for the material and labor expended directly or indirectly in the hauling of the train. But a mere increase in the trainload does not secure in return for the material and labor expended in terminal and maintenance work more units of terminal service or of maintenance service. I believe that the present railroad situation demands, especially in view of the substantial increase in the cost of labor, that there should be concentrated upon terminal work and upon maintenance work an amount of attention corresponding to that which has been concentrated in the past on increasing the trainload, both in ascertaining and analyzing the facts as to existing

methods and results and in devising ways and means to secure improved results. If we assume that the cost of transportation absorbs about 50 per cent of the total operating cost, probably two-fifths thereof should be attributed to the terminal cost as distinguished from the road cost, and if so, about 20 per cent of the total operating expenses should be regarded as representing terminal expenses. If then we assume that the maintenance of equipment and maintenance of way and structures together absorb about 45 per cent of the total operating cost, it follows (and these percentages are purely tentative and suggestive) that about 65 per cent of the total operating cost relates to terminal and maintenance work and only about 30 per cent relates to road transportation. It is true that the favorable influence of improvement in the trainload is not confined to the 30 per cent representing road transportation cost, but tends also to diminish the cost per ton mile of the terminal and maintenance work (unless—and this is a point which may be overlooked at times—the increase in the trainload leads to an offsetting increase in the terminal of maintenance cost). But it is also true that it is of supreme importance that new methods be devised to the end that the necessary maintenance and terminal work, now costing approximately 65 per cent of the total operating expenses, shall be obtained more economically.

But however much may be secured through operating economies of the sort I have mentioned, I am convinced that the people of this country will insist also on additional economies being secured through the greater unification of railroad facilities. I do not believe the public is going to be willing to pay the price involved in maintaining so many different railroad companies, so many different terminal organizations, and so many different ownerships of railroad equipment. The public is going to realize by degrees that, without sacrificing anything of real value in a competitive way, it can save an important part of the heavy cost of railroad operation by forcing further unifications.

The Transportation Act of 1920 provides that the Interstate Commerce Commission shall adopt a plan for voluntary consolidation of the railroads. I believe this is a useful first step, but I believe that eventually there will probably have to be a compulsory consolidation into a few large systems. Meanwhile I believe that the terminals ought to be more fully consolidated and that there ought to be speedily developed a plan for the

common ownership of freight cars, and I believe that methods can and should be found for overcoming the admitted difficulties in the way.

To recapitulate my impressions as to the present railroad situation, the difficulties of accurate appraisal are far greater now than ever before in our history, but it is safe to conclude that, even with a normal traffic ways must be found to reduce the heavy operating costs so as to reduce rates and still leave the railroads with an adequate return and the opportunity to build up adequate reserves. The new operating burdens which confront the railroads must be met by new remedies, and I believe these remedies will be partly found if as much attention and planning are concentrated upon terminal work and maintenance work as have heretofore been concentrated on increasing the trainload. I believe further that a highly important part of these economies can and must be found in the consolidation of terminals, the common ownership of freight cars, and eventually in the consolidation of the railroads themselves into a very small number of large systems.